

Section 1. Registration Information

Source Identification

Facility Name:	Verde Water Treatment Plant
Parent Company #1 Name:	City of Phoenix, Water Services Department
Parent Company #2 Name:	

Submission and Acceptance

Submission Type:	Re-submission
Subsequent RMP Submission Reason:	5-year update (40 CFR 68.190(b)(1))
Description:	
Receipt Date:	15-Jun-2009
Postmark Date:	15-Jun-2009
Next Due Date:	15-Jun-2014
Completeness Check Date:	08-Jul-2010
Complete RMP:	Yes
De-Registration / Closed Reason:	
De-Registration / Closed Reason Other Text:	
De-Registered / Closed Date:	
De-Registered / Closed Effective Date:	
Certification Received:	Yes

Facility Identification

EPA Facility Identifier:	1000 0003 5197
Other EPA Systems Facility ID:	AZD981648595

Dun and Bradstreet Numbers (DUNS)

Facility DUNS:	
Parent Company #1 DUNS:	78984358
Parent Company #2 DUNS:	78984358

Facility Location Address

Street 1:	7696 N. Red Mountain Road
Street 2:	
City:	Scottsdale
State:	ARIZONA
ZIP:	85264
ZIP4:	9701
County:	MARICOPA

Facility Latitude and Longitude

Latitude (decimal):	33.592222
Longitude (decimal):	-111.529167
Lat/Long Method:	Interpolation - Photo
Lat/Long Description:	Plant Entrance (General)
Horizontal Accuracy Measure:	25
Horizontal Reference Datum Name:	North American Datum of 1983
Source Map Scale Number:	24000

Owner or Operator

Operator Name:	Glenda Novak
Operator Phone:	(602) 534-7589

Mailing Address

Operator Street 1:	200 W. Washington, WSD, 9 FL
Operator Street 2:	
Operator City:	Phoenix
Operator State:	ARIZONA
Operator ZIP:	85003
Operator ZIP4:	
Operator Foreign State or Province:	
Operator Foreign ZIP:	
Operator Foreign Country:	

Name and title of person or position responsible for Part 68 (RMP) Implementation

RMP Name of Person:	Paul Zelenka
RMP Title of Person or Position:	Assistant to the Superintendent
RMP E-mail Address:	paul.zelenka@phoenix.gov

Emergency Contact

Emergency Contact Name:	Paul Zelenka
Emergency Contact Title:	Assistant to the Superintendent
Emergency Contact Phone:	(602) 534-3911
Emergency Contact 24-Hour Phone:	(602) 763-9349
Emergency Contact Ext. or PIN:	
Emergency Contact E-mail Address:	paul.zelenka@phoenix.gov

Other Points of Contact

Facility or Parent Company E-mail Address:	
Facility Public Contact Phone:	(602) 262-6627
Facility or Parent Company WWW Homepage Address:	www.phoenix.gov

Local Emergency Planning Committee

LEPC:	Maricopa County LEPC
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Full Time Equivalent Employees

Number of Full Time Employees (FTE) on Site:	14
FTE Claimed as CBI:	

Covered By

OSHA PSM :	Yes
EPCRA 302 :	Yes
CAA Title V:	
Air Operating Permit ID:	

OSHA Ranking

OSHA Star or Merit Ranking:

Last Safety Inspection

Last Safety Inspection (By an External Agency) Date:	28-Jan-2009
Last Safety Inspection Performed By an External Agency:	SRPMIC Tribal Pre-OSHA Inspection

Predictive Filing

Did this RMP involve predictive filing?:

Preparer Information

Preparer Name:
Preparer Phone:
Preparer Street 1:
Preparer Street 2:
Preparer City:
Preparer State:
Preparer ZIP:
Preparer ZIP4:
Preparer Foreign State:
Preparer Foreign Country:
Preparer Foreign ZIP:

Confidential Business Information (CBI)

CBI Claimed:
Substantiation Provided:
Unsanitized RMP Provided:

Reportable Accidents

Reportable Accidents:	See Section 6. Accident History below to determine if there were any accidents reported for this RMP.
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Process Chemicals

Process ID:	1000008853
Description:	Chlorination System
Process Chemical ID:	1000009961
Program Level:	Program Level 3 process
Chemical Name:	Chlorine
CAS Number:	7782-50-5
Quantity (lbs):	22000
CBI Claimed:	
Flammable/Toxic:	Toxic

Process NAICS

Process ID:	1000008853
Process NAICS ID:	1000009062
Program Level:	Program Level 3 process
NAICS Code:	22131
NAICS Description:	Water Supply and Irrigation Systems

Section 2. Toxics: Worst Case

Toxic Worst ID: 1000007500

Percent Weight:	100.0
Physical State:	Gas liquified by pressure
Model Used:	EPA's RMP*Comp(TM)
Release Duration (mins):	10
Wind Speed (m/sec):	1.5
Atmospheric Stability Class:	F
Topography:	Rural

Passive Mitigation Considered

Dikes:	
Enclosures:	Yes
Berms:	
Drains:	
Sumps:	
Other Type:	

Section 3. Toxics: Alternative Release

Toxic Alter ID: 1000008272

Percent Weight:	100.0
Physical State:	Gas liquified by pressure
Model Used:	EPA's RMP*Comp(TM)
Wind Speed (m/sec):	3.0
Atmospheric Stability Class:	D
Topography:	Rural

Passive Mitigation Considered

Dikes:	
Enclosures:	Yes
Berms:	
Drains:	
Sumps:	
Other Type:	

Active Mitigation Considered

Sprinkler System:	Yes
Deluge System:	
Water Curtain:	
Neutralization:	Yes
Excess Flow Valve:	Yes
Flares:	
Scrubbers:	Yes
Emergency Shutdown:	Yes
Other Type:	

Section 4. Flammables: Worst Case

No records found.

Section 5. Flammables: Alternative Release

No records found.

Section 6. Accident History

No records found.

Section 7. Program Level 3

Description

The City takes an active role in preventing accidental releases by ensuring that its employees are properly trained in the safe operation of covered processes and the safe handling of treatment chemical. The City has also established and maintains procedures for emergency notification and response. These are reviewed with employees on a periodic basis and revised to accommodate changes in staffing when they occur. To increase employee safety and awareness, the City:

- Maintains up-to-date safety information and operating procedures,
- Performs regular preventative maintenance,
- Provides periodic refresher training on safe handling of chemicals, and
- Conducts quarterly safety drills

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000008237
Chemical Name:	Chlorine
Flammable/Toxic:	Toxic
CAS Number:	7782-50-5

Prevention Program Level 3 ID:	1000007206
NAICS Code:	22131

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	09-Apr-2009
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Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	09-Apr-2009
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The Technique Used

What If:	Yes
Checklist:	
What If/Checklist:	
HAZOP:	Yes
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	30-Nov-2009

Major Hazards Identified

Toxic Release:	Yes
Fire:	
Explosion:	
Runaway Reaction:	
Polymerization:	

Overpressurization:	
Corrosion:	Yes
Overfilling:	
Contamination:	
Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	
Earthquake:	
Floods (Flood Plain):	
Tornado:	
Hurricanes:	
Other Major Hazard Identified:	

Process Controls in Use

Vents:	
Relief Valves:	Yes
Check Valves:	Yes
Scrubbers:	Yes
Flares:	
Manual Shutoffs:	Yes
Automatic Shutoffs:	Yes
Interlocks:	
Alarms and Procedures:	Yes
Keyed Bypass:	
Emergency Air Supply:	
Emergency Power:	Yes
Backup Pump:	
Grounding Equipment:	
Inhibitor Addition:	
Rupture Disks:	Yes
Excess Flow Device:	
Quench System:	
Purge System:	
None:	
Other Process Control in Use:	

Mitigation Systems in Use

Sprinkler System:	Yes
Dikes:	
Fire Walls:	Yes
Blast Walls:	
Deluge System:	
Water Curtain:	
Enclosure:	Yes
Neutralization:	Yes
None:	
Other Mitigation System in Use:	

Monitoring/Detection Systems in Use

Process Area Detectors:	
Perimeter Monitors:	Yes
None:	
Other Monitoring/Detection System in Use:	

Changes Since Last PHA Update

Reduction in Chemical Inventory:

Increase in Chemical Inventory:

Change Process Parameters:

Installation of Process Controls:

Installation of Process Detection Systems:

Installation of Perimeter Monitoring Systems:

Installation of Mitigation Systems:

None Recommended:

None:

Yes

Other Changes Since Last PHA or PHA Update:

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures): 09-Apr-2009

Training

Training Revision Date (The date of the most recent review or revision of training programs): 09-Apr-2009

The Type of Training Provided

Classroom: Yes

On the Job: Yes

Other Training:

The Type of Competency Testing Used

Written Tests: Yes

Oral Tests:

Demonstration: Yes

Observation: Yes

Other Type of Competency Testing Used:

Maintenance

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures): 09-Apr-2009

Equipment Inspection Date (The date of the most recent equipment inspection or test): 09-Apr-2009

Equipment Tested (Equipment most recently inspected or tested): Scrubber system

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures):

Change Management Revision Date (The date of the most recent review or revision of management of change procedures): 28-Aug-1998

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review): 28-Aug-1998

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit): 26-Sep-2008

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit): 30-Jul-2009

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):

Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans): 09-Apr-2009

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures): 09-Apr-2009

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures): 09-Apr-2009

Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance): 09-Apr-2009

Confidential Business Information

CBI Claimed:

Section 8. Program Level 2

Section 9. Emergency Response

Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?):

Facility Plan (Does facility have its own written emergency response plan?): Yes

Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?): Yes

Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?): Yes

Healthcare (Does facility's ER plan include information on emergency health care?): Yes

Emergency Response Review

Review Date (Date of most recent review or update of facility's ER plan): 08-Jun-2009

Emergency Response Training

Training Date (Date of most recent review or update of facility's employees): 01-May-2009

Local Agency

Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated): SRPMIC Fire Department

Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated): (000) 000-0911

Subject to

OSHA Regulations at 29 CFR 1910.38: Yes
OSHA Regulations at 29 CFR 1910.120: Yes
Clean Water Regulations at 40 CFR 112: Yes
RCRA Regulations at CFR 264, 265, and 279.52: Yes
OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254: Yes
State EPCRA Rules or Laws: Yes
Other (Specify):

Executive Summary

Verde Water Treatment Plant (WTP) is one of the many facilities owned and operated by the City of Phoenix. Verde WTP has prepared a Risk Management Plan (RMP) in accordance with the EPA and OSHA regulatory requirements. A brief overview of the RMP and the associated policies at Verde WTP are described below.

Prevention and Response Policies

The City takes an active role in preventing accidental releases by ensuring that its employees are properly trained in the safe operation of covered processes and the safe handling of treatment chemicals. The City has also established and maintains procedures for emergency notification and response. These are reviewed with employees on a periodic basis and revised to accommodate changes in staffing when they occur. To increase employee safety and awareness, the City:

- Â· Maintains up-to-date safety information and operating procedures,
- Â· Performs regular preventative maintenance,
- Â· Provides periodic refresher training on safe handling of chemicals, and
- Â· Conducts quarterly safety drills

Facility Description and Regulated Substances

Verde WTP utilizes surface water supplies to produce potable water through a series of physical and chemical treatment operations.

The regulated substance handled at Verde WTP is chlorine. The chlorine is stored in 1-ton containers, with a maximum of 11 containers (22,000 lbs.) on site.

Prevention Steps for Chlorine

The prevention program fulfills the requirements of the OSHA Process Safety Management (PSM) rule and the EPA RMP rule, and includes:

- Â· Formal and on-the-job training,
- Â· Written operating procedures, and
- Â· A process equipment preventive maintenance program.

The primary means of mitigating an accidental chlorine release at Verde WTP is the installation of a chemical scrubber for the chlorine building. The scrubber is maintained on a regular basis to ensure proper operation if needed during a chlorine release.

Accident History

There has been no accidental release of the covered chemical in the past five years.

Emergency Response Program

This facility has established and maintains an emergency response program that is coordinated with local response agencies. The goals of the program are to protect on-site employees from the hazardous effects of the releases and to minimize the effects of releases on the general public. The program is routinely reviewed and updated to reflect personnel and regulatory changes.

Planned changes for Improved Safety

Ideas for changes to improve safety are actively sought from employees. Employee meetings that focus on safety issues are held regularly at the facility. Employees are encouraged and trained to recognize hazards and present ideas to eliminate them or to minimize the potential consequences of those hazards.

During the re-submission of the RMP document, a process hazard analysis of the chlorine system was conducted with key employees to fulfill the prevention program requirements. During these sessions, recommendations were made for the purpose of improving safety and preventing accidental chemical releases. Each recommendation will be or has been considered for implementation. Though not all recommendations may be implemented, the exercise provided all affected employees with a heightened awareness of safety issues related to the covered processes.